

Antoine Désir

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ACADEMIC APPOINTMENTS	Assistant Professor, INSEAD Postdoctoral Research Scientist, Google NYC	Sept 2018 - Aug 2017 - Aug 2018
EDUCATION	Columbia University , New York, NY Ph.D. Candidate in Operations Research <ul style="list-style-type: none">• Thesis: <i>Fundamental Tradeoffs for Modeling Customer Preferences in Revenue Management</i>. - Revenue Management and Pricing Section Dissertation prize, 2018• Advisor: Professor Vineet Goyal Columbia University , New York, NY M.S., Operations Research, May 2012 Ecole Polytechnique , Palaiseau, France Diplôme d'ingénieur, Majored in Applied Mathematics	2012 - 2017 2012 2008 - 2011
RESEARCH INTERESTS	operations management, revenue management, online advertising, choice modeling, approximation algorithms	
JOURNAL PUBLICATIONS	<ol style="list-style-type: none">1. Sparse process flexibility designs: Is long chain really optimal?, Operations Research 64(2), pages 416-431, 2016. (joint with Vineet Goyal, Yehua Wei and Jiawei Zhang)<ul style="list-style-type: none">- Finalist in the George Nicholson student paper competition, 2014- Finalist in the MSOM student paper competitions, 20142. Capacity constrained assortment optimization under the Markov chain choice model, Management Science 66(2), pages 698-721, 2020. (joint with Vineet Goyal, Danny Segev and Chun Ye)<ul style="list-style-type: none">- Finalist in the George Nicholson student paper competition, 20153. Mallows-smoothed distribution over rankings approach for modeling choice, Operations Research, 69(4), pages 1206-1227, 2021. (joint with Vineet Goyal, Danny Segev and Srikanth Jagathula)<ul style="list-style-type: none">- Finalist in the MSOM student paper competitions, 20174. Capacitated assortment optimization: hardness and approximation, Operations Research, Articles in Advance, 2021. (joint with Vineet Goyal and Jiawei Zhang)5. Shapley meets uniform: An axiomatic framework for attribution in online advertising, Forthcoming in Management Science. (joint with Omar Besbes, Vineet Goyal, Garud Iyengar and Raghav Singal)<ul style="list-style-type: none">- Second place in the Revenue Management and Pricing Student Paper Competition (Student: Raghav Singal), 2019	

SUBMITTED /
UNDER REVISION

6. Best of both worlds ad contracts: guaranteed allocation and price with programmatic efficiency, Major revision at **Management Science** (In preparation for resubmission). (joint with Maxime Cohen, Nitish Korula and Balu Sivan)

7. Robust Assortment Optimization under the Markov Chain Model, Under second round of review at **Operations Research** (First round: Reject and resubmit). (joint with Vineet Goyal, Bo Jiang, Tian Xie and Jiawei Zhang)

8. Incentive-Compatible Assortment Optimization for Online Marketplaces, Major revision at **Management Science** (In preparation for resubmission). (joint with Santiago Balseiro)

9. Robust Label Attribution for Real-Time Bidding, Under first round of review at **Manufacturing and Service Operation Management**. (joint with Martin Bompaire and Benjamin Heyman)

10. Price delegation to learning agents, Under first round of review at **Management Science**. (joint with Atalay Atas and Florin Ciocan)

WORKING
PAPERS

11. Representing Random Utility Choice Models with Neural Networks (joint with Ali Aouad)

REFEREED
CONFERENCE
PROCEEDINGS

12. Shapley meets uniform: An axiomatic framework for attribution in online advertising *Proceedings of ACM World Wide Web Conference (WWW)*, 2019. (joint with Omar Besbes, Vineet Goyal, Garud Iyengar and Raghav Singal)

13. Assortment optimization under the Mallows model. *Proceedings of Neural Information Processing Systems (NIPS)*, 2016. (joint with Vineet Goyal, Srikhant Jagabathula and Danny Segev)

14. Assortment optimization under a random swap based distribution over permutations model. *Proceedings of ACM Conference on Electronic Commerce (EC)*, 2016. (joint with Vineet Goyal and Danny Segev)

15. Games of network disruption and idempotent algorithms. *Proceedings of European Control Conference (ECC)*, 2013. (joint with William McEneaney)

OTHER
PUBLICATIONS

Boosting Vaccine Production Needs the Right Degree of Flexibility, November 3 2021, *INSEAD knowledge*. (with Prashant Yadav)

AWARDS

Management Science Meritorious Service Award, 2021
Dean's Commendation for Excellence in MBA Teaching, 2020
Management Science Meritorious Service Award, 2020
2nd Place Revenue Management and Pricing Student Paper Prize (Student: Raghav Singal), 2019
Revenue Management and Pricing Section Dissertation prize, 2018
Management Science Meritorious Service Award, 2018
Finalist MSOM Student Paper Competition, 2017
Finalist George Nicholson Student Paper Competition, 2015
Finalist George Nicholson Student Paper Competition, 2014
Finalist MSOM Student Paper Competition, 2014

TEACHING
EXPERIENCE

INSEAD

2018 -

- Process and Operations Management (MBA core)
- Social Media Analytics (MBA elective)
- Foundations of Optimization (PhD)

- Linear Optimization (PhD)

Columbia University

- Introduction to Probability and Statistics (Instructor) **Fall 2013**
- Operations Consulting (Teaching assistant) **2012 - 2016**

INDUSTRY
EXPERIENCE

Google, New York, NY

Research Intern

Summer 2016

Developed a mathematical framework to investigate and price a novel contract structure which allows advertisers to secure impressions in advance without any negotiations. (Hosts: Nitish Korula and Balasubramanian Sivan)

Mediaocean, New York, NY

Software Engineer Intern

Summer 2013, Summer 2014

Implemented a prediction algorithm for reach and frequency of a advertisement campaign and developed visualization tools allowing advertising agencies to compare publishers based on historical data for their main products Spectra and Prisma (80,000+ users).

INVITED
SEMINARS

HKUST, ISOM	Aug 2021
Yale, School of Management	May 2021
European TOM Series	Nov 2020
Criteo (Beer and Tech series)	Nov 2019
SPO (Seminaire d'Optimisation Parisien)	Mar 2019
New York University, Stern School of Business	May 2018
Google Research, NYC	Mar 2017
HEC Montreal	Feb 2017
UCLA, Anderson School of Management	Feb 2017
University of Pittsburgh, Industrial Engineering Department	Feb 2017
Carnegie Mellon University, Tepper School of Business	Feb 2017
HEC Paris	Feb 2017
INSEAD, Technology & Operations Management	Feb 2017
University of Chicago, Booth School of Business	Jan 2017
Harvard Business School, TOM	Jan 2017
Duke University, Fuqua School of Business	Jan 2017
Michigan University, Ross School of Business	Jan 2017
University of British Columbia, Sauder School of Business	Jan 2017
University of Illinois at Urbana-Champaign	Jan 2017
Cornell University, ORIE Department	Jan 2017
Northwestern University, Kellogg School of Management	Jan 2017
MIT, Sloan School of management	Dec 2016
Young Researchers Workshop at Cornell ORIE	Oct 2015

CONFERENCE
PRESENTATIONS

Revenue Management and Pricing Conference,(Virtual)	Jun 2021
MSOM, (Virtual)	June 2021
INFORMS, Seattle, WA	Nov 2019
POMS, Washington DC	May 2019
INFORMS, Phoenix, AZ	Nov 2018
ISMP, Bordeaux, France	Jul 2018
Revenue Management and Pricing Conference, Toronto, Canada	Jun 2018
INFORMS, Houston, TX	Oct 2017
INFORMS, Nashville, TN	Nov 2016
MSOM, Auckland, NZ	Jun 2016
Revenue Management and Pricing Conference, New York, NY	May 2016

INFORMS Annual Meeting, Philadelphia, PA	Nov 2015
MSOM, Toronto, ON	Jun 2015
Revenue Management and Pricing Conference, New York, NY	May 2015
ISMP, Pittsburg, PA	Jul 2015
INFORMS Annual Meeting, San Francisco, CA	Nov 2014
MSOM, Seattle, WA	Jun 2014
INFORMS Annual Meeting, Minneapolis, MN	Nov 2013

PROFESSIONAL
SERVICE

Reviewer (journals): *Operations Research, Management Science, Manufacturing & Service Operations Management, Production and Operations Management, Stochastic Systems, INFORMS Journal on Optimization, Operations Research Letters*

Reviewer (conferences): ACM Conference on Economics and Computation (EC), Web Conference, Neural Information Processing Systems (NeurIPS)

Session chair: INFORMS 2018, 2019, 2020, 2021

Program Committee Member for the Web Conference in 2019, 2020, 2021.

Judge for MSOM Student Paper Competition in 2020, 2021.

Judge for MSOM Supply Chain Management SIG in 2020, 2021.